

Pushing the Envelope			
2005 Mathematics			
Content Standards			
Hawaii Mathematics			
Grade 5			
Activity/Lesson	State	Standards	
Physics and Math (pgs. 43-63)	HI	MA.5.MA.5.1.1	Understand numbers, ways of representing numbers, relationships among numbers, and number systems: Represent percent and ratio using pictures or objects
Physics and Math (pgs. 43-63)	HI	MA.5.MA.5.1.2	Understand numbers, ways of representing numbers, relationships among numbers, and number systems: Use equivalent forms of whole numbers, fractions, ratios, decimals, and percents to solve problems
Physics and Math (pgs. 43-63)	HI	MA.5.MA.5.10.3	Use symbolic forms to represent, model, and analyze mathematical situations: Describe situations with constant or varying rates (e.g., miles per hour, items per box)
Pushing the Envelope			
2005 Mathematics			
Content Standards			
Hawaii Mathematics			
Grade 6			
Activity/Lesson	State	Standards	
Physics and Math (pgs. 43-63)	HI	MA.6.MA.6.10.1	Use symbolic forms to represent, model, and analyze mathematical situations: Interpret and solve problem situations involving two different variables
Pushing the Envelope			
2005 Mathematics			
Content Standards			
Hawaii Mathematics			
Grade 7			
Activity/Lesson	State	Standards	
Physics and Math (pgs. 43-63)	HI	MA.7.MA.7.4.2	Understand attributes, units, and systems of units in measurement; and develop and use techniques, tools, and formulas for measuring: Uses ratios and proportions to relate a scale drawing to the actual object
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2005 Mathematics			
Content Standards			
Hawaii Mathematics			
Grade 8			
Activity/Lesson	State	Standards	

Chemistry (pgs. 25-41)	HI	MA.8.MA.8.4.1	Understand attributes, units, and systems of units in measurement; and develop and use techniques, tools, and formulas for measuring: Select and use appropriate units to measure the surface area and volume of solids
Chemistry (pgs. 25-41)	HI	MA.8.MA.8.4.4	Understand attributes, units, and systems of units in measurement; and develop and use techniques, tools, and formulas for measuring: Use formulas to determine the surface area and volume of selected prisms, cylinders, and pyramids
Physics and Math (pgs. 43-63)	HI	MA.8.MA.8.1.3	Understand numbers, ways of representing numbers, relationships among numbers, and number systems: Use ratios and proportions to represent the relationship between two quantities
Physics and Math (pgs. 43-63)	HI	MA.8.MA.8.4.3	Understand attributes, units, and systems of units in measurement; and develop and use techniques, tools, and formulas for measuring: Use ratios and proportions to solve measurement problems
Physics and Math (pgs. 43-63)	HI	MA.8.MA.8.10.4	Use symbolic forms to represent, model, and analyze mathematical situations: Use the slope of a line to describe a constant rate of change
Pushing the Envelope			
2005 Mathematics			
Content Standards			
Hawaii Mathematics			
Grades 9-12 (Algebra)			
Activity/Lesson	State	Standards	
Types of Engines (pgs. 11-23)	HI	MA.9-12.MA.AI.4.1	Understand attributes, units, and systems of units in measurement; and develop and use techniques, tools, and formulas for measuring: Use formulas, functions, or conversion equations to solve problems dealing with determining a measurement based on another derived or given measurement
Chemistry (pgs. 25-41)	HI	MA.9-12.MA.AI.4.1	Understand attributes, units, and systems of units in measurement; and develop and use techniques, tools, and formulas for measuring: Use formulas, functions, or conversion equations to solve problems dealing with determining a measurement based on another derived or given measurement
Physics and Math (pgs. 43-63)	HI	MA.9-12.MA.AI.4.1	Understand attributes, units, and systems of units in measurement; and develop and use techniques, tools, and formulas for measuring: Use formulas, functions, or conversion equations to solve problems dealing with determining a measurement based on another derived or given measurement

Rocket Activity (pgs. 69-75)	HI	MA.9-12.MA.AI.4.1	Understand attributes, units, and systems of units in measurement; and develop and use techniques, tools, and formulas for measuring: Use formulas, functions, or conversion equations to solve problems dealing with determining a measurement based on another derived or given measurement
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